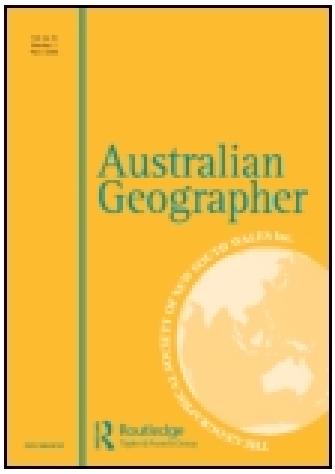

Australian Geographer
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/cage20

Human-Nature Relations in Suburban Gardens

Emma R. Power [a]
[a] Macquarie University , Australia
Published online: 14 Oct 2010.

To cite this article: Emma R. Power (2005) Human-Nature Relations in Suburban Gardens, Australian Geographer, 36:1, 39-53, DOI: 10.1080/00049180500050847

To link to this article: http://dx.doi.org/10.1080/00049180500050847

Australian Geographer, Vol. 36, No. 1,
pp. 39–53, March 2005

Human–Nature Relations in Suburban Gardens

EMMA R. POWER, *Macquarie University, Australia*

ABSTRACT *Gardens have been considered predominately in terms of a nature–culture binary, with nature positioned as a passive object of human control. Placing the human at the centre of the garden, these perspectives understand this space in terms of human cultures, needs and understandings. This paper critiques these perspectives, questioning whether gardens are ever simply human constructions. Actor–network theory (ANT) provides a framework for this research, which examines human–nature relations through a focus on the material processes of gardening. Drawing on interviews with suburban gardeners in northern Sydney and the analysis of two popular gardening magazines, the research shows that gardening entails an embodied engagement between active human and non-human actors. Involving processes of collaboration, negotiation, challenge and competition, gardening is a dynamic process. Describing human relations with the plants of the garden, this research argues for gardens to be understood as hybrid achievements.*

KEY WORDS *Gardens; suburbs; nature–culture dualisms; actor–network theory; domestication.*

Introduction

Gardens provide an opportunity to investigate human–nature relations within an everyday context, and have often been cast as important sites for engaging and learning about nature (see Bhatti 1999; Wilson 1992). Gardener's accounts of these relations have received some attention, with gardening typically situated as a rejuvenating activity that provides opportunities for environmental education and action (e.g. Bhatti & Church 2001, 2004; Brindley 1999; Robbins & Sharp 2003). However, the specific nature and form that these interactions assume has received little attention within academic writing. Instead, typical accounts of the garden emphasise the triumph of human action over an inert and docile landscape. Controlled and manipulated with respect to the plans and needs of the gardener, these spaces have been read as simple reflections of the cultures and understandings of their (human) gardener (e.g. Brindley 1999; Caldicott 1997; Holmes 1999; Skene 1996). Non-humans are largely absent within these narratives, emerging simply as the raw material from which gardens are created. This paper addresses this absence, drawing attention to the interactions between human and non-human actors in the garden. In particular, I will examine how gardeners conceptualise and are altered by the presence of non-human entities.

Framed through an engagement with actor-network theory (ANT) this paper highlights the inherent hybridity of garden spaces. It extends previous attempts to

ISSN 0004-9182 print/ISSN 1465-3311 online/05/010039–15 © 2005 Geographical Society of New South Wales Inc.
DOI: 10.1080/00049180500050847

recognise the materiality of gardening (e.g. Bhatti & Church 2001, 2004; Brook 2003; Hitchings 2003) by drawing attention to the moments of collaboration, negotiation, challenge and competition that make gardening a dynamic and lively relation. Recognising an active non-human presence, this research shows that gardens are always more than human centred. I first review the academic literature surrounding the garden, showing how it has typically constructed a nature–culture binary, before introducing ANT as a framework for the research. The second section examines the practices of gardening through the accounts of gardeners in Sydney's north-western suburbs and the analysis of two popular gardening magazines—*Better Homes and Gardens* and *Burke's Backyard*.

Nature–culture in understandings of gardens

Gardens have typically been depicted as sites of human activity in which non-human 'natures' are shaped according to the cultures, ideas and actions of the human gardener. Caldicott (1997, p. 51) encapsulates this approach when she suggests that 'the study of domestic gardens becomes the study of ordinary people, creating, modifying and maintaining the vernacular landscape'. The labours of gardening are central to this understanding, and feature prominently throughout the literature (e.g. Alexander 2002; Brindley 1999; Bhatti & Church 2000; Duruz 1994; Holmes 1999; Skene 1996). Through these practices gardeners understand and negotiate their position in the garden site, and create spaces that reflect their needs and understandings (see Alexander 2002; Brindley 1999; Caldicott 1997; Chevalier 1997; Duruz 1994; Seddon 1997; Simons 1993). Gardens subsequently appear as flexible spaces that can be moulded according to the wishes of the gardener.

Following this emphasis on human activity, gardening is typically represented as a process of ordering or controlling nature. Holmes (1999, p. 152) reflects this position when she describes gardening as a 'ritual of habitation'. As nature is ordered according to an 'individual's actions and associations [and] those of their culture' (1999, p. 152), it becomes a passive 'other' that is malleable according to human needs and wants. Subject to the whims of human cultures it is physically changed, owned and civilised through everyday 'rituals'. Similarly, Alexander (2002, p. 861) argues that gardens 'need to be *kept* in order to *keep all things rank and gross in nature at bay*' (emphasis in original). Understood in this way, gardens are a site of domestication in which nature, altered and controlled, is brought 'within' human culture (Anderson 1997). A related group of writers extends this vision to depict gardens as the 'unnatural' products of human development (e.g. Hunt 1991; Seddon 1997). Produced through human action, gardens become objects of culture.

When gardens are constructed as human achievements, they can be read as objects that reflect the cultures and understandings of their (human) gardener. Gardens have thus been understood to 'reflect changing social and economic patterns' (Caldicott 1997, p. 51; see also Askew and McGuirk 2004; Robbins & Sharp 2003; Wilson 1992), and promote understandings of feminine subjectivity (Duruz 1994; Skene 1996) and domestic space (Alexander 2002; Brindley 1999). They have also been examined as indicative of nationalist sentiment (Caldicott 1997; Fiske *et al.* 1987; Holmes 1999; Knight 1990; Seddon 1997) and changing cultures (Trimble 1995). For example, Duruz (1994) examines how two women construct their sense of self and family through the gendered division of garden work, while Skene (1996) positions gardening as a means by which three prominent

women privately struggled against the repressions of Victorian society. More recently, Askew and McGuirk (2004) investigated the suburban garden as a site of consumption, arguing that water use in this space is implicated in the accumulation of cultural capital. For these authors the garden is a human/cultural construction that is shaped by contrasting notions of social distinction and social conformity.

By placing emphasis on human understandings and representations, this literature obscures any *non*-human presence. When non-humans do appear they are constructed as objects of human knowledge and control. Providing a backdrop for human activity and the material from which gardens are created, they perform a purely aesthetic contribution to human worlds and are rarely the subject of inquiry. Limiting non-humans to these positions of passivity and manipulation, while affording humans a dominant and active position, this literature constructs a nature–culture divide. These dualistic understandings position nature as 'a set of passive *objects* to be used and worked on by people' (Macnaghten & Urry 1995, p. 206), and are part of a broader way that nature and culture have been conceptualised in Western contexts. Essential to this positioning is the construction of a monologue, so that

> the 'other' never gets to talk back on its own terms. The communication is all one way, and the pole of power refuses to receive the feedback that would cause it to change itself, or open itself to dialogue. (Rose 1999, pp. 176–66)

This ensures the dominance of (human) culture by rendering nature as a passive 'other' that is available for use and exploitation by people. Anderson (1997, p. 464) shows that these principles are enacted through the politics of domestication in which plants and animals 'become mutually accustomed to conditions and terms laid out by humans'. In the garden this might encompass the selective breeding of plants, or gardening practices that act to physically control plant growth, thus ensuring the expression of the gardener's plans. These practices rely on the presupposed separation of nature and culture, but also work to distinguish humans who are understood to be unique in their ability to domesticate and civilise.

Within the garden literature this framework has been enacted in two main ways. Firstly, gardens have been understood as human achievements that reflect the cultures and understandings of the human gardener. This narrative denies agency to non-human natures, which are viewed simply as the 'raw material of culture' (Haraway 1991, p. 198). Secondly, the garden literature has represented human action as 'unnatural'. This understanding develops from a tradition that posits modern humans at the pinnacle of evolutionary development (see Soper 1995). Possessing agency, humans are emancipated from 'natural' evolutionary constraints. Framed in this way, gardens are cultural achievements as they are a product of the human gardener's rational and conscious thought. Conversely, the non-human plants and animals that inhabit the garden are a product of their genes and subsequently slide from view, providing a backdrop for human activity and the material from which gardens are created (see Ingold 1995 for further discussion of this separation).

However, recent research draws attention to the contingency of these frameworks, showing that ideas about nature and culture vary across time and space (e.g. Demerrit 2001, 2002; Macnaghten & Urry 1995, 2001; Rose 1999; Suchet 2002). These findings are extended by a limited number of garden studies that

recognise an active non-human presence in this space (see Bhatti & Church 2001, 2004; Brook 2003). Following Hitchings (2003), this paper takes ANT into the garden in order to extend these understandings. ANT provides a framework that assists in the disruption of dualistic perspectives through the assertion that knowledge and identity are relational achievements. This approach ensures a sensitivity to the presence of non-humans by placing emphasis on the moments of interaction and relation between diverse human and non-human actors. The following sections show how ANT is mobilised within this project, and introduce the methodological approaches that allow this paper to go beyond Hitchings' (2003, p. 103) emphasis on actors 'working together'.

Actor–network theory (ANT)

Actor–network approaches provide an opportunity to move beyond dualistic accounts of the garden. Understanding human worlds as collective achievements that rely on the enrolment of diverse human and non-human entities, ANT facilitates a re-scripting of gardens as hybrid spaces whose being occurs through the presence and interactions of heterogeneous actors. ANT's strength is founded in its recognition that categories, such as agency, identity, power and difference, are relational achievements that are 'spun' between sets of heterogeneous actors (Whatmore 1999). This move decouples agency from the object/subject binary (Whatmore 1999, p. 27) so that non-human animals and other material aspects of the world, previously relegated to a passive 'nature', can be recognised as active and performing agency. In this model, agency is understood as an outcome of network building (see Hitchings 2003; Murdoch 1997; Whatmore 1999).

ANT provides a framework for this research, but appears not as a final answer but as a reminder, a means of engaging and producing complexity. In this way it becomes an attempt 'to be sensitive to the multitudes of circulating forces that surround us, affecting both each other and ourselves' (Hitchings 2003, p. 100). In this research ANT promotes an emphasis on the material processes of gardening and ensures a sensitivity to the presence of non-humans. Central to this achievement is the dissociation of action from linguistic competence, a move which facilitates awareness of the non-human presence (e.g. Callon 1986; Cloke & Jones 2003, 2004; Eden *et al.* 2000; Hitchings 2003; Whatmore 2002). Critically, language and text become just one means through which actors can relate.

The notion of enrolment is key to this approach, and describes a process through which actors attempt to enlist the interest or action of another 'so that their own desired performance can take place' (Hitchings 2003, p. 107). For example, gardeners might feed, water and trim plants so that they appear in a manner that supports the gardener's vision for the space. If successful, these practices allow the gardener to take credit for the 'combined actions of all enrolled entities' (Murdoch 1997, p. 331). Similarly, Hitchings (2003) shows that plants can take the centre of the garden network, enrolling the interest and action of the human gardener through the promise of a low-maintenance garden environment or by appealing to the gardener's aesthetic sensibilities. However, the notion of enrolment also hints at the possibility of less harmonious relations, as actors struggle and compete to ensure their own performance. This vision has not been explored within the garden literature, and conflicts with Hitchings' (2003, p. 103) emphasis on people and plants 'working together' in the production of garden spaces.

Framed by ANT, this paper moves beyond Hitchings' (2003) account of harmonious gardening relations, to highlight the more controversial moments of collaboration, negotiation, competition and challenge that make gardening a lively and dynamic pursuit. The following section shows how this engagement with ANT shapes the methodological approaches pursued within the research.

Methods

Interviews with 22 suburban gardeners and the analysis of two gardening magazines, *Better Homes and Gardens* and *Burke's Backyard*, allowed this research to enter and engage with diverse garden spaces. These methodological choices were common within the reviewed literature, with interviews frequently employed to gain individual perspectives on garden construction (e.g. Bhatti & Church 2000, 2001; Brindley 1999; Hitchings 2003). Reviews of work by writers, artists, garden designers and architects are also common, assisting in the identification of trends, or influences on domestic developments (e.g. Alexander 2002; Caldicott 1997; Holmes 1999; Skene 1996).

These methodological choices set my research apart from typical actor-network studies as they centralise the human perspective and do not overtly adopt or explore the non-human (e.g. Eden *et al.*, 2000; Hitchings 2003; Whatmore 2002). However, this reflects the aims of the research, which questions how gardeners conceptualise and are altered by the presence of non-human entities. These methods allowed non-humans to emerge through their interactions with the gardeners. Two factors assisted this approach. The first was a focus on the practices of gardening. Interview questions focused on everyday gardening practices, and gardeners' demonstrations were recorded within a field diary. The magazines also emphasised these practices, providing gardeners with advice about appropriate gardening techniques.

The second factor that facilitated this approach was the process of conducting interviews 'as a walk around the actual garden site' (Hitchings 2003, p. 103). This approach meant that non-humans were always physically present. The benefits of this immersion became evident as interviewees were drawn around the garden in pursuit of memories and thoughts, and through the demonstration of diverse garden roles. More than a casual walk around the garden, many interviewees became physically and emotionally involved with the garden, with weeds pulled, flowers smelt, fruit tasted and favourite plants, animals and spaces visited.

The 20 interviews were located in the north-western suburbs of Sydney and took place with 22 self-identified gardeners who responded to advertisements placed in a local newspaper and in the newsletter of two gardening clubs. Interviews were semi-structured in order to reflect the interests of both the participant and interviewer. Topics of interest included the features of the garden, processes of decision making in the garden, favoured plant characteristics, use of the garden and garden maintenance. These discussions revealed the diversity of participants, the confident and almost encyclopaedic commitment of some gardeners contrasting with those who professed to a more sporadic and casual style of gardening. Women represented a greater proportion of respondents—men were present at 7 of the 20 interviews, compared to 15 women. Further, 21 of the participants were aged 40 years and over, with one aged in her 30 s. Interestingly, a similar gender and age distribution was observed in Bhatti and Church's (2001) English garden study.

Two popular gardening magazines, *Better Homes and Gardens* and *Burke's Backyard* were also considered. The magazines added depth to the research, providing an opportunity to engage directly with recommended gardening practices. Reflecting the magazines' interest in disseminating gardening advice, it was expected that they would provide an overtly human-centred account. However, the magazines and interviews were found to express similar themes, both admitting an active non-human presence. However, these sources differed in the tone of their accounts. This point of difference generated diversity within the research, as the personalised and emotive accounts of gardening provided during interviews contrasted with the more idealised and mechanistic models that emerged from the magazines. Interestingly, these models varied throughout the magazines, with multiple messages emerging even within single editions. Analysis was limited to editions published between January 2002 and June 2003 inclusive, with articles listed under the 'Gardens' heading on the contents page of each magazine selected. The demographic profile of the readers is similar for both magazines, and is broadly similar to that represented in the interviews (Roy Morgan Research 2003a,b).

Coding and analysis of the interviews and magazines proceeded with a sensitivity to the presence of non-humans. By emphasising the interactions that occurred between human and non-human actors my approach was distanced from Hitchings (2003, p. 103) who proceeded 'with an eye to foregrounding the material interactions of the garden and how different actors were practically *working together*' (emphasis added). My approach allowed a more dynamic and less harmonious garden to emerge, as the gardeners highlighted moments of collaboration, negotiation, challenge and competition in their relations with the non-humans. Rather than finding gardeners and natures working 'together', moments occurred in which these diverse actors worked against each other, to the benefit of neither. It is this aspect which represents the primary contribution made by this research. In the following section I will draw out these diverse relations. I will first briefly outline how gardens can be understood as human centred, before showing how they can be understood through processes of collaboration. In the second section gardens will be shown to emerge from the active interrelations of both human and non-human actors.

The human garden

At first glance the gardens could be viewed as human achievements. Reflecting the reviewed literature, the non-humans of these spaces appeared to be available for manipulation and control by the human gardeners. Careful plant selection, garden preparation, ongoing maintenance and plant breeding programs kept the non-human in check and ensured that gardener's plans stayed in place. Two examples drawn from the plant–human relation capture this perspective. The first sees gardens viewed as visual displays, while the second understands plants as organisms in need of control.

When gardens were viewed as visual displays the individual plants became important only as contributions to an overall image or scene. Flowering plants were part of this plan in 15 of the gardens, providing 'prettiness' (Jessica) and a 'change of colour' (Bridget). Similarly, Jacob explained how he strategically selected plants with a complimentary leaf shape and texture, which he would highlight with a contrasting 'feature' plant.

Plants were similarly organised throughout the magazines, themed by colour and structure:

> Sterling silver: plants that shine in the winter garden: All that glitters is not gold. And in the garden it's the silver foliage plants that set a shining example, bouncing light around the garden like a series of tiny mirrors. (*Burke's Backyard* August 2002, p. 68)

> Burgundy Beauties: Cheryl Maddocks says this rich hue can add real mood to your gardening planting palette. (*Burke's Backyard* March 2003, p. 64)

Positioned in this way, the plants became simply one aspect of the gardener's creation. As Hitchings (2003, p. 103) notes: 'the garden seemed to be an inert space upon which [the gardener's] aesthetic sensibilities were laid down'.

The plants were also understood as organisms in need of maintenance and control. This perspective emphasised the manual processes of gardening. Through these methods the gardeners could regulate the appearance and growth of plants and ensure their plans for the site. Gardening was thus seen as a labour-intensive pursuit that involved

> … cutting back, pruning, trimming, feeding, mowing the lawns, more in summer than winter, just general maintenance. Sometimes taking a plant out and moving it, putting in a new plant. (Melissa)

'Back-to-basics' sections in the *Burke's Backyard* magazine instructed readers in these performances, including how to install an irrigation system (March 2003, pp. 48–50); prune a tree, pot and divide orchids, carry pots, and select a plant (April 2003, pp. 30–3); use gardening tools (April 2003, pp. 60–1); move trees and shrubs (July 2002, pp. 60–2); fertilise the garden (September 2002, pp. 48–53); and make a garden low maintenance (November 2002, pp. 86–95).

These practices forcibly held plants 'in place' and were critical in mediating 'poor' plant choices. In other words, they allowed the gardeners to take the centre of the garden network and speak for the plants through the final appearance of the garden (see Murdoch 1997). Reflecting the reviewed literature, these gardens afforded the humans a sense of ownership and control, and described a process of domestication in which 'nature' is brought into the home environment and subjected to processes of socio-technical control (Anderson 1997). In fact, these plants were sufficiently domesticated that it was possible to ignore them and speak just to the people of the garden, for the plants merely represented the ideas, cultures and concerns of the people who had planned and constructed the garden. Viewed in this way, gardening can be understood as a monologue produced by the all-powerful gardener (Rose 1999).

However, it was also evident that gardening was never simply a straightforward process in which the gardeners laid their plans onto an inert and docile landscape. Instead, the gardeners had to learn about the plants, provide their needs and manually shape and tidy them. This required observing the plants and researching their needs, as Jacob explained when he described some early gardening disasters:

> … when I first built this house in 1972 I started off with no trees, no nothing so I did what everybody does, I put a lawn in and went out to a nursery and bought a whole lot of plants, quite a lot of money actually,

> stuck them in and half died. I decided that perhaps I should start to learn about what I'm trying to do, I mean I stuck azaleas in full sun, they were all non-natives.

Through research, observation and day-to-day gardening, the gardeners engaged with the plants and allowed their future actions to be guided by their observations. In this way, today's plants can be understood as structuring, to some extent, both the actions of the gardener and the context of their successors. Plants thus begin to emerge as active in the garden site, suggesting that gardens are less human centred than they initially appear. The following section develops this perspective to consider moments where these non-humans are central to understandings of the garden and gardening.

The hybrid garden: collaboration, challenge and responsibility

In the preceding section, gardening emerged increasingly as a reflective process. Necessarily engaging with non-humans through the processes of observation, research and gardening, the gardeners began to admit 'nature' as critical to the garden space. This section extends this project, considering moments when non-humans emerged as active in their relations with people. Sometimes enrolling the care and interest of gardeners, these plants collaborated with the humans in the production of the garden. I will touch on this point briefly, showing how plants and people became entangled through relations of care. Other plants entered more conflictive relations, challenging human constructions of the garden and gardening. These plants will be introduced as 'weeds'.

Planting the garden

While walking around the gardens, the gardeners drew my attention to plants that had in some way 'captured' their imagination. Some plants enlisted the interest of the gardeners with their appearance, as Boyd explained when he introduced his favourite tree:

> I've got a couple of deciduous trees here to give a bit of autumn colour which I like, that one over there is a big one, it's an English type of tree, a Paratea, we had them down in Melbourne, magnificent Autumn colours, it puts the Liquid Amber to shame for its Autumn colours. . . . And in spring when the new leaves come up its just a mass of beautiful soft green leaves, it's absolutely magnificent.

Plants like these demanded the attention of the gardeners, who related their efforts to learn about the plants and help them to grow. Boyd thus described his attempts to maintain the Paratea throughout the recent drought, providing it with 'a lot of water', while Diana dejectedly explained how she had accidentally killed her favourite orchids 'with kindness'. John explained:

> each tree has its . . . I might be going to far to say it's got its individuality, but each tree has individual needs in terms of water, sunlight, protection from the winds . . . all that sort of thing, and I've been learning all this sort of thing, year after year, as every season comes and goes, and it's a very enjoyable hobby.

Over time, individual plants were thus written into the space as it was constructed with respect to their needs.

The magazines also admitted plants as entities with individual requirements. But introducing them as one might the cast of a play, the relation was never personal or emotional:

> Flanders poppy is an annual and hence is grown from seed ... if they find your garden to their liking, these self-seeding poppies will return to bloom each year. (*Burke's Backyard* November 2002, p. 50)

> Himalayan blue poppy: It is very particular in its growing requirements, demanding similar conditions to its mountain home—cool cloudy summers, a small amount of shade and moist free-draining soil. (February 2003, p. 51)

Gardening was represented as a responsive activity in which gardeners needed to be aware of the specific needs of plants.

Articles by Leo Schofield in *Burke's Backyard* contrasted with this detached representation. Highlighting a personal engagement and passion for the plants he presented, Schofield emphasised the individual characteristics of plants, emotionally and evocatively writing about his relationship with them. As he explains in an article about *Thunbergia mysorensis*:

> Happening upon a favourite flower is a little like falling in love. It usually begins with looks. Just as one fancies a particular look in a person, so one can be captivated instantly by the appearance of a plant. And as with people, the plant one fancies need not be conventionally attractive. (February 2002, p. 66)

Schofield had first seen this vine at a home in Pittwater:

> Its long racemes dangled before one's eyes and from time to time a small bird, a honeyeater perhaps, would alight on the flowers to suck the sweet nectar from its myriad cups. As they did so, the racemes would swing to and fro. The sight was as captivating as the plant which, I was informed by its proud owner, needed heat to grow successfully. When building her house she had asked her architect to place a small rectangle of glass above the vine so that the temperature necessary to make this plant do its lovely thing could be maintained. (February 2002, p. 66)

Schofield was attracted to the plant as the honeyeater had been. This attraction, whether by virtue of the plants' aesthetic or behavioural characteristics, emerged as plants captured people, thus ensuring they were cared for and could reproduce. However, even plants that 'enrolled' the gardeners were subject to gardening processes such as tidying and trimming.

The plants also shaped the physical form and appearance of the garden, and provided an environment for other plants, non-human animals and houses. The 'feathery foliage' on a pepper tree in Anita's garden provided shade for her house, but allowed sufficient sunlight to penetrate to the ground which allowed grass to grow. A Chinese elm sheltered the camellias and other shade-loving plants in Melissa's garden. She described her distress when the original tree developed rot. When her efforts to save the tree failed, Melissa was forced to remove the tree, and has subsequently planted a new one, explaining, 'as that grows it will change

the structure of the garden a bit more *but it will adapt and I will adapt to it*' (emphasis added). Other plants provided a barrier against invasive plants and provided privacy from neighbours and undesirable features. For example, trees in Boyd's garden were critical in stopping the visual and auditory pollution from a nearby expressway.

These plants recommended themselves to the gardeners through a variety of characteristics. They also altered the appearance of the gardens and supported the presence of plants and animals, both human and non-human. They were critical to the experience of the garden space and often elicited an emotional commitment from the gardeners. As Hitchings (2003, p. 106) observed of the plants in the gardens he visited, some were able to 'draw the person down into their world, and make for an understanding of their concerns and a commitment to their care'. Cloke and Jones (2003) report similar relations between people and trees in Victoria Square, Bristol. This 'being-for-the-other' (Cloke & Jones 2003, p. 210) unsettles nature–culture frameworks by drawing people and plants into a relation of care. It also ruptures the ideal of domestication that saw plants changing in order to satisfy the needs of humans. Rather, in this garden, domestication describes a process in which the humans were equally altered. Anderson (1997, p. 478) anticipates this when she describes an ethics of care in which 'people … reserved their deepest commitments for their pets and their most ardent affections for their gardens'.

By admitting an active non-human presence this section disrupts nature-culture frameworks that position non-humans as passive and distant from human pursuit. Further, it challenges human-centred understandings of domestication, arguing that both human and non-human are changed through this relation. This view of the garden is distinct from those represented within the literature review. When non-humans are understood to be central to the gardening relation, gardens can no longer be read as a straightforward reflection of human cultures and understandings. A discussion about 'weeds' provides a framework within which to examine this idea, and suggests that domestication proceeds out of an engagement with plants that are already amenable to this process.

Conflict and competition: the 'weed' and the 'weeder'

Not all of the plants that lived in and used the garden were encouraged or enjoyed by the gardeners, a point that became evident as the people pointed out and pulled out plants that they identified as 'weeds'. Weeds were plants that entered ongoing, competitive relations with the gardeners by refusing their enrolment into the gardeners' plans. In this way they can be understood as plants that challenge the ideal of domestication and the inevitability of the gardeners' visions for the site. Subsequently, they also represent a challenge to the human-centred gardens that appeared throughout the garden literature. When plants can be understood to disrupt human plans, gardens can no longer be read as simple reflections of human cultures and understandings.

Brian joked that weeds were easy to identify: 'if you pull it out and put it in again it will grow, if it doesn't grow, it's a plant'. Common to the gardeners' explanations was a belief that weeds were unwanted plants, as Bruce captured in his definition:

> A weed is a plant growing out of place, if you've got a rose growing in your cabbage patch then that's a weed, you pull it out. If you've got a cabbage growing up in your rose patch then you pull that out, it's a weed.

Naomi also adopted this approach. In her organic vegetable garden weeds were classified according to potential use:

> [A weed is something that's] not functional. I know that some people consider dandelions as weeds but I occasionally use the roots of them to make coffee, so I don't see that as a weed, but then I would see some of this clover, this sort of stuff as weeds, because it doesn't even look attractive. If it looks pretty I don't sort of worry about it, but [my husband's] pretty anal in that respect, if it's not meant to be there it's gone [laugh]. I always hassle him, crush, kill, destroy ... that's one of his favourite things to do in the garden.

Burke's Backyard magazine contained a regular 'Weed Watch' section that introduced and profiled plant species that were believed to have become weeds. As the gardeners observed, weeds were those plants that had grown out of human control:

> Alligator Weed: This free-floating aquatic weed is listed as a 'Weed of National Significance'. It can affect farms and waterways within a single season's growth. (March 2003, p. 73)

> Fireweed: A member of the daisy family, it's a vigorous weed with yellow flowers (in fact if you see anything with yellow flowers over a broad area of Australia, it's probably a weed). Fireweed is registered as a noxious weed in parts of NSW and it is spreading rapidly, via its dandelion-like seed heads, through pastures and backyards in many other areas of Australia. (June 2002, p. 41)

Mobility emerged as a key component of this issue. Where some plants spread through a central root system, others could arrive from outside of the garden's borders by harnessing themselves to wind, water, shoe treads, lawnmowers and birds. Gardeners also provided a means of transport by moving plants from their indigenous location for cultivation in the garden site (see Brook 2003). Grown out of their usual conditions, these plants often grew more rapidly than expected, which challenged the ability of the gardeners to maintain control. Put simply, weeds were plants that exploited the available garden conditions, for these spaces were certainly not 'designed' to cater to them.

Weed control was a major task in all gardens. The gardeners became 'weeders' as they monitored growth within the garden boundaries (all gardeners) and erected physical barriers to prevent the spread of mobile plants (Warren, Jessica, Bruce, Bronwyn, Boyd, Melissa). The magazines also advocated the physical and chemical removal of weeds, using agents such as Roundup and Zero. The conflictive nature of this relation made these gardens distinct from those described by Hitchings (2003), who presented a series of overwhelmingly harmonious relations. For example, John outlined his attempts to deal with oxalis, a particularly invasive species:

> If you get that you'll never get it out. When I first married and we lived near Crows Nest, we lived there 14 years and I spent 14 years trying to get rid of oxalis, I couldn't. Poisoning it didn't make a difference, digging it out didn't, 14 years later it was still there, I couldn't get rid of it. ... I have got a little bit of oxalis here which unfortunately has come with nursery pots amazingly enough. If I get it in the garden I now put the spade or trowel

> underneath it, take the whole thing out, soil and all, and put it in the waste bin, the whole lot. There's no use trying to pull it out, it just leaves the bulb behind and it continues to spread.

As this example shows, weeding entailed an ongoing and competitive relation between the gardeners and plants as each attempted to ensure their own garden performance. In this way, weeds can be understood as plants that challenge the ideal of domestication by refusing their designation within the gardener's plans. When plants are understood to be capable of challenging the roles set out by the people of the garden, gardening emerges as distinctly less human centred. This suggests that the plants that *are* enrolled into the garden are not simply forced into this position by calculating gardeners. Rather, they may be amenable to the role and have as much to gain as the gardeners.

It is possible to argue, as Hitchings (2003) does, that gardeners are enrolled by the plants to provide them with care. But the mutual benefits arising from the relation suggests that it does not have to be either plant or human centred, or a position that oscillates between these. Rather, it might be described as a process of collaboration. In this garden, the people have been enrolled by the plants to provide them with care, and the plants have been enrolled by the people to contribute to an overall garden composition. An example drawn from the preceding section illuminates this image. Melissa had been wanting a large tree that would provide enough shelter for her shade-loving plants. The Chinese elm recommended itself to Melissa, she was attracted to its unique 'umbrella' shape and dense, deciduous leaf patterns. As Melissa provided the elm with care and a space in which to live and grow, it provided shade for her home and the rest of the garden. This process so fully entwined the needs and actions of the plant and human that neither can be understood as central to the relation. Both were acting and both had been enrolled. Gardening might thus be understood through the metaphor of conversation. As gardeners slipped from the centre of the garden network, gardening became a dialogical engagement that involved processes of negotiation and reflection. This view of domestication finds a human who is as much changed as the plant is. This view disrupts the human-centred gardens that appear throughout the garden literature, and extends Hitchings' vision of gardeners and plants 'working together' (2003, p. 103).

Conclusion

The gardens visited for this research were a site of everyday interaction between diverse human and non-human entities. This paper investigated the role of these actors, with a particular emphasis on the relations between people and plants. Informed by an actor–network approach, and following Hitchings (2003), emphasis was placed on the material practices of gardening. This approach proved critical as it allowed the non-humans to emerge through their interactions with the gardeners. Gardens were first understood as a product of human labour and culture, but this perspective was disrupted as the gardeners described a reflective engagement with the non-humans of this space. The paper then highlighted moments when these plants and animals were active in their relations with the gardeners. Some non-humans entered collaborative relationships with the gardeners, in which the needs and actions of the people and plants became entwined through the relations of care. Other non-humans asserted their presence through an ongoing resistance to human plans. Capable of both assisting and contesting the gardener's plans, these

non-humans challenged human-centred understandings of the garden. Instead, these gardens were described as 'hybrid', for neither human nor non-human was central to their construction.

Recognising an active non-human presence, this research makes two interrelated contributions. Firstly, these findings present a challenge to human-centred accounts of the garden, and facilitate a more detailed and dynamic analysis of gardens and gardening. Garden studies are challenged to move beyond an emphasis on gardeners controlling and manipulating 'nature' to recognise relations of collaboration, negotiation, competition and challenge. Recognition of these dynamic and often conflictive relations between people and plants extends Hitchings' (2003) discussion of how people and plants 'work together' in the production of garden spaces. Future research might investigate whether these findings can be extended to individuals who do not identify as gardeners.

Secondly, when gardening is understood to involve a dynamic engagement between human and non-human actors, gardens can no longer be read as simple reflections of human cultures and understandings. Rather, there are a myriad of non-human actors whose interactions with each other and the gardener contribute both to the appearance of the garden and how gardeners understand and engage with the space. This new literature might extend existing garden studies. For instance, it might investigate how the presence of particular plants and animals influences and challenges the construction of distinct gendered (following Duruz 1994; Skene 1996) and national identities (following Holmes 1999; Knight 1990), or question how non-humans contribute to and disrupt gardeners' displays of social distinction and conformity (following Askew & McGuirk 2004). Recognising the active role that non-humans play in structuring garden relations will enhance understandings of gardens and broader human–nature relations.

Acknowledgements

My thanks go to Robyn Dowling for her guidance throughout the research and preparation of this paper. Also, to the 22 gardeners who shared their time and gardening experiences with me.

Correspondence: Emma R. Power, Department of Human Geography, Macquarie University, NSW 2109, Australia. E-mail: epower@els.mq.edu.au

REFERENCES

Alexander, C. (2002) 'The garden as occasional domestic space', *Signs: Journal of Women in Society*, 27, pp. 857–71.

Anderson, K. (1997) 'A walk on the wild side: a critical geography of domestication', *Progress in Human Geography*, 21, pp. 463–85.

Askew, L.E. & McGuirk, P.M. (2004) 'Watering the suburbs: distinction, conformity and the suburban garden', *Australian Geographer*, 35, pp. 17–37.

Bhatti, M. (1999) 'The meanings of gardens in the age of risk', in Chapman, T. & Hockey, J. (eds) *Ideal homes? Social change and domestic life*, Routledge, London and New York, pp. 181–93.

Bhatti, M. & Church, A. (2000) '"I never promised you a rose garden": gender, leisure and home-making', *Leisure Studies*, 19, pp. 183–97.

Bhatti, M. & Church, A. (2001) 'Cultivating natures: homes and gardens in late modernity', *Sociology*, 35, pp. 365–83.
Bhatti, M. & Church, A. (2004) 'Home, the culture of nature and meanings of gardens in late modernity', *Housing Studies*, 19, pp. 37–51.
Brindley, A. (1999) 'The role of backyards in suburban life: a case study—Millswood, Adelaide', *South Australian Geographical Journal*, 98, pp. 61–77.
Brook, I. (2003) 'Making here like there: pace, attachment, displacement and the urge to garden', *Ethics, Place and Environment*, 6, pp. 227–34.
Caldicott, E. (1997) 'Gardening Australian style—the Adelaide example', *South Australian Geographical Journal*, 96, pp. 42–53.
Callon, M. (1986) 'Some elements in the sociology of translation: domestication of the scallops and fishermen of St. Brieuc Bay', in Law, J. (ed.) *Power, action, belief*, Routledge & Kegan Paul, London, pp. 19–34.
Chevalier, S. (1997) 'From woollen carpet to grass carpet: bridging house and garden in an English suburb', in Miller, D. (ed.) *Material cultures: why some things matter*, UCL Press, London, pp. 47–71.
Cloke, P. & Jones, O. (2003) 'Grounding ethical mindfulness for/in nature: trees in their place', *Ethics, Place and Environment*, 6, pp. 195–214.
Cloke, P. & Jones, O. (2004) 'Turning in the graveyard: trees and the hybrid geographies of dwelling, monitoring and resistance in a Bristol cemetery', *Cultural Geographies*, 11, pp. 313–41.
Demerrit, D. (2001) 'Being constructive about nature', in Castree, N. & Braun, B. (eds) *Social nature: theory, practice and politics*, Blackwell, Oxford and Malden, MA, pp. 22–40.
Demerrit, D. (2002) 'What is the "social construction of nature"? A typology and sympathetic critique', *Progress in Human Geography*, 26, pp. 767–90.
Duruz, J. (1994) 'Suburban gardens: cultural note', in Ferber, S. Healy, C. McAuliffe, C. (eds) *Beasts of surburbia: reinterpreting the cultures in Australian suburbs*, Melbourne University Press, Melbourne, pp. 17–32.
Eden, S., Tapsell, S.M. & Tunstall, S.M. (2000) 'Translating nature: river restoration as nature–culture', *Environment and Planning D: Society and Space*, 18, pp. 257–73.
Fiske, J., Hodge, B. & Turner, G. (1987) *Myths of Oz: reading Australian popular culture*, Allen & Unwin, North Sydney.
Haraway, D. (1991) *Simians, cyborgs and women: the reinvention of nature*, Free Association Books, London.
Hitchings, R. (2003) 'People, plants and performance: on actor network theory and the material pleasures of the private garden', *Social and Cultural Geography*, 4, pp. 99–112.
Holmes, K. (1999) 'Gardens', *Imaginary Homelands: The Dubious Cartographies of Australian Identity*, 61, pp. 152–62.
Hunt, J.D. (1991) 'The garden as cultural object', in Adams, W.H. & Wrede, S. (eds) *Denatured visions: landscape and culture in the twentieth century*, Museum of Modern Art, New York, pp. 19–32.
Ingold, T. (1995) 'Building, dwelling and living: how animals and people make themselves at home in the world', in Strathern, N. (ed.) *Shifting contexts: transformations in anthropological knowledge*, Routledge, London and New York, pp. 57–80.
Knight, S. (1990) *The selling of the Australian mind: from first fleet to third Mercedes*, Heinemann, Victoria.
Macnaghten, P. & Urry, J. (1995) 'Towards a sociology of nature', *Sociology*, 29, pp. 205–20.
Macnaghten, P. & Urry, J. (2001) 'Bodies of nature: introduction', in Macnaghten, P. & Urry, P. (eds) *Bodies of nature, Sage*, Thousand Oaks, New Delhi and London, pp. 1–11.
Murdoch, J. (1997) 'Towards a geography of heterogeneous associations', *Progress in Human Geography*, 21, pp. 321–37.
Robbins, P. & Sharp, J.T. (2003) 'Producing and consuming chemicals: the moral economy of the American lawn', *Economic Geography*, 79, pp. 425–51.
Rose, D.B. (1999) 'Indigenous ecologies and an ethics of connection', in Low, N. (ed.) *Global ethics and environment*, Routledge, London, pp. 175–87.
Roy Morgan Research (2003a) *Better Homes and Gardens: reader profile*, Roy Morgan Research. Pacific Publications, Sydney.
Roy Morgan Research (2003b) *Burke's Backyard: reader profile*, Roy Morgan Research. www.burkesbackyard.acp.com.au/readerhtml/
Seddon, G. (1997) *Landprints: reflections of place and landscape*, Cambridge University Press, Cambridge, New York and Melbourne.
Simons, Z.G. (1993) *Interpreting nature: cultural construction of the environment*, Routledge, New York.

Skene, J. (1996) 'Gardens of their own: exploring the garden as feminine space', *Limina*, 2, pp. 18–27.
Soper, K. (1995) *What is nature?*, Blackwell, Oxford.
Suchet, S. (2002) '"Totally wild"? Colonising discourses, indigenous knowledges and managing wildlife', *Australian Geographer*, 33, pp. 141–57.
Trimble, J. (1995) 'Myth and reality: the garden in Australia', *Australian Garden History*, 6, pp. 11–16.
Whatmore, S. (1999) 'Hybrid geographies: rethinking the "human" in Human Geography', in Massey, D., Allen, J. & Sarre, P. (eds) *Human geography today*, Polity Press, Cambridge.
Whatmore, S. (2002) *Hybrid geographies: natures cultures spaces*, Sage, London, pp. 22–39.
Wilson, A. (1992) *The culture of nature: North American landscape from Disney to Exxon Valdez*, Blackwell Publishers, Malden, MA.